

Screening for high-risk drinking and alcohol use disorder: update of the 2023 national clinical practice guideline

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Abstract

Background: Current screening tools for harmful alcohol consumption have fallen out of step with recent guidance on the health risks of alcohol. To address this gap, the Canadian Research Initiative in Substance Matters updated the screening recommendations for high-risk drinking and alcohol use disorder (AUD) in the 2023 national clinical practice guideline.

Methods: Following a systematic review of literature published between Jan. 1, 2013, and Feb. 24, 2023, that examined screening tools for high-risk drinking and AUD, the updated recommendations were developed by a multi-disciplinary national committee, which included people with lived and living experience. We scored the recommenda-

tions and certainty of evidence using the Grading of Recommendations, Assessment, Development, and Evaluation tool. We used the Appraisal of Guidelines for Research and Evaluation II instrument and the Guidelines International Network's principles for disclosure of interests and management of conflicts to ensure the update met international standards for transparency, high quality, and methodological rigour.

Recommendations: Acknowledging that time constraints are the most commonly reported barrier to universal alcohol screening, we developed 5 recommendations involving a simple screening method, to identify and address both unhealthy alcohol consumption and more serious problems related to alcohol. The

recommendations include asking all patients about alcohol consumption and providing educational support to all those who drink above Canada's Guidance on Alcohol and Health's low-risk threshold. We propose a simple screening algorithm to optimize and tailor further intervention, including when to assess for possible AUD.

Interpretation: The revised screening recommendations represent a time-saving and pragmatic approach intended to be a resource for universal screening for alcohol risks and problems. The recommendations streamline the process of identifying and addressing the health needs of those who consume alcohol in a hazardous way or may have more serious problems related to alcohol.

In 2023, Canada's Guidance on Alcohol and Health (CGAH) was released and showed that consuming more than 2 standard drinks per week or more than 2 standard drinks per occasion is associated with progressively increased risk of negative medical and physical health effects (Box 1).¹ The new guidance replaced Canada's now-outdated Low-Risk Alcohol Drinking Guidelines, which had implied that alcohol's risks mainly emerge at more than 2 Canadian standard drinks per day or 10 standard drinks per week for women, and more than 3 standard drinks per day or 15 standard drinks per week for men.²

These changes have obvious implications for existing alcohol screening recommendations.³ With respect to "higher-risk" or

hazardous alcohol consumption, currently recommended screening tools were often developed in reference to US definitions of heavy alcohol consumption, which are similar to Canada's outdated recommendations.⁴

Other concerns are evident with existing screening measures.⁵ With respect to generalizability, screening tools for heavy alcohol consumption were often assessed in research contexts⁴ detached from the conversational nature of most alcohol assessments in the medical context.⁶ Regarding alcohol use disorder (AUD), many screening tools were developed before the substantial revision of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5),⁴ released in 2013, and

Box 1: Canada's Guidance on Alcohol and Health¹

To reduce the risk of harm from alcohol, it is recommended that people living in Canada consider reducing their alcohol use. The reasons to do so derive from the following facts:

- There is a continuum of risk associated with weekly alcohol consumption where the risk of harm from alcohol is:
 - Low for people who consume 2 standard drinks* or less per week;
 - Moderate for those who consume between 3 and 6 standard drinks* per week; and
 - Increasingly high for those who consume 7 standard drinks* or more per week.
- Consuming more than 2 standard drinks* per drinking occasion is associated with an increased risk of harms to self and others, including injuries and violence.
- When pregnant or trying to get pregnant, there is no known safe amount of alcohol use.
- When breastfeeding, not drinking alcohol is safest.

Sex and gender: Above the upper limit of the moderate risk zone for alcohol consumption, the health risks increase more steeply for females than males. Far more injuries, violence, and deaths result from males' alcohol use, especially in the case of per-occasion drinking.

Youth: Recommendations do not apply to youth under the legal drinking age, for whom the main message should be to delay alcohol use for as long as possible.

*A standard drink means beer 341 mL (12 oz), 5% alcohol; cooler, cider, ready-to-drink 341 mL (12 oz), 5% alcohol; wine 142 mL (5 oz), 12% alcohol; or spirits (whisky, vodka, gin, etc.), 143 mL (1.5 oz), 40% alcohol.

Adapted with permission from Paradis C, Butt P, Shield K, et al. the Low-Risk Alcohol Drinking Guidelines Scientific Expert Panels. Canada's Guidance on Alcohol and Health: final report. Ottawa: Canadian Centre on Substance Use and Addiction; 2023:1-89. Available: <https://www.ccsa.ca/canadas-guidance-alcohol-and-health>.¹

have rarely been subjected to critical appraisal for study quality. For instance, although potentially imprecise measurement of the underlying diagnosis is a well-described source of bias,⁷ evaluations of screening tools under DSM-5 have often not employed formal DSM-5 diagnostic interviews.⁴

Additionally, despite US recommendations for screening for “unhealthy” alcohol consumption in all adults aged 18 years and older,⁸ US national surveys found that less than 3% of ambulatory care visits involved screening for alcohol use with a validated questionnaire.⁹ An Ontario survey reported that only 7% of family physician respondents indicated that they use a validated tool to screen all patients for nicotine and AUDs.¹⁰ Among the most common explanation is the time required to complete lengthy screening instruments.^{11,12}

To address the above, the Canadian Research Initiative in Substance Matters (CRISM) updated the screening recommendations in the 2023 Canadian guideline for the clinical management of high-risk drinking and AUD.³ The updated advice is meant to recognize barriers, focus provider time according to the degree and specific nature of alcohol risks and problems, and align with current evidence.^{1,13,14}

Scope

The screening recommendations in this guideline update are intended for adults and youth (aged 12 to 25 yr). The intended audience is health care professionals in primary care, as well as in acute care settings where alcohol problems are often undiagnosed (e.g., emergency departments, medical wards). The guideline is also intended to be a resource for policy-makers developing health system interventions, and for people with alcohol problems, their families, and other affected populations.

Screening considerations for pregnant people are addressed in the original guideline.³

Recommendations

We developed 5 recommendations to identify and address risky alcohol consumption, as well as more serious problems related to alcohol, as summarized in Table 1 and Figure 1. We rated recommendations for certainty of evidence and strength using the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) approach (Box 2).¹⁵ We developed a simple screening algorithm that incorporates suggested questions to aid in applying the recommendations (Figure 1).

In addition to the principles of care outlined in the original guideline,³ consistent with the GRADE system, we considered both the quality of evidence and other important factors, such as feasibility (e.g., clinician time constraints) and likely risks and benefits.¹⁵ All recommendations were graded through committee consensus.

The evidence tables from the systematic review are included in Appendix 1, eTable 1 (available at www.cmaj.ca/lookup/doi/10.1503/cmaj.251759/tab-related-content), along with other supporting documentation in Appendix 1, eTables 2 to 5. Illustrative cases describing the application of these recommendations to common clinical scenarios are available in Appendix 1, Section 5.

All adult and youth (aged 12–25 yr) patients should be screened routinely for alcohol consumption above low risk as defined in Canada's Guidance on Alcohol and Health (strong recommendation, moderate-certainty evidence).

The original CRISM guideline screening working group,³ along with several bodies — including the World Health Organization¹⁶ and the US Preventive Services Task Force (USPSTF)⁸ — recommend routine alcohol screening. For instance, the USPSTF evidence review concluded with moderate certainty that screening for unhealthy alcohol use in primary care settings in adults aged 18 years or older was of moderate net benefit.⁸ Accordingly, we propose a simple nonstigmatizing approach to raise patient

Table 1: Summary of recommendations

Recommendation	Strength of recommendation	Certainty of evidence
1. All adult and youth (aged 12–25 yr) patients should be screened routinely* for alcohol consumption above low risk as defined in CGAH.	Strong	Moderate
2. Individuals drinking at or below the CGAH low-risk levels can be offered brief education aimed at reinforcing safer alcohol consumption.	Strong	Moderate
3. Individuals drinking above the CGAH low-risk levels should be assessed for alcohol-attributable risks and possible health or other problems attributable to alcohol use that might imply an underlying alcohol use concern.†	Strong	Moderate
4. In individuals who exceed the CGAH low-risk thresholds but do not endorse alcohol-attributable problems, personalized information on alcohol risks should be provided and, where appropriate, advice on strategies to cut down consumption can be provided without pursuing a DSM-5 diagnostic assessment.*	Strong	Moderate
5. Patients who exceed the CGAH low-risk thresholds and who subsequently report possible problems with alcohol consumption should be moved directly to a DSM-5 diagnostic interview for alcohol use disorder rather than further screening.	Strong	Moderate

Note: CGAH = Canada's Guidance on Alcohol and Health, DSM-5 = *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*.

*See Appendix 1, Section 2 (available at www.cmaj.ca/lookup/doi/10.1503/cmaj.251759/tab-related-content) for screening indications and frequency.

†In individuals with a very high pre-test probability, a DSM-5 diagnosis can be pursued rather than asking about alcohol problems (Appendix 1, Section 5, Case 6).

awareness of the CGAH, such as, “I discuss the effects of alcohol with all my patients. Negative effects are now known to emerge at lower levels than previously believed. Would it be all right to talk about Canada's Guidance on Alcohol and Health today?” Although it can be anticipated that a nonjudgmental approach will allow for a conversation about CGAH recommendations and open the opportunity to discuss patient alcohol consumption in most people, the autonomy of those who prefer not to talk about alcohol should be respected (Appendix 1, Section 5, Case 1).³

Patients interested in further discussion can then be assessed in reference to the CGAH drinking thresholds, with the following suggested questions: “In the average week, how many standard-sized drinks — such as 12 oz of 5% beer, a 5-oz glass of 12% wine, or a 1.5-oz glass of spirits — would you estimate you consume?”, followed by (if appropriate), “Currently, do you consume more than 2 standard drinks in an evening or other drinking occasion?”

Based on their responses, patients can be stratified according to being above or below the CGAH risk thresholds (Figure 1). Whereas past reviews have not identified optimal screening frequency,⁸ the screening working group for the original CRISM guideline and others have recommended annual screening.^{3,17} Additionally, several laboratory results (e.g., liver enzyme or hematologic abnormalities), physical examination findings (e.g., hypertension), or specific health complaints (e.g., insomnia, low mood) should prompt more frequent screening. Detailed information on considerations for screening frequency and circumstances that should prompt screening and follow-up are described in the original guideline³ and in Appendix 1, Section 2.

While the above questions are compatible with how clinicians are advised to ask about and quantify alcohol consumption in existing screening tools,⁴ we graded the certainty of evidence as moderate, as screening according to CGAH thresholds has not been validated.¹ We rated the strength of this recommendation as strong, given that there are no commonly reported harms from screening and there are known health benefits to reducing alcohol consumption.^{1,8,18}

Individuals drinking at or below the CGAH low-risk levels can be offered brief education aimed at reinforcing safer alcohol consumption (strong recommendation, moderate-certainty evidence).

Whereas past guidance has recommended brief education intended to reinforce safer alcohol consumption practices, this has involved longer screening instruments that are no longer recommended by CRISM.^{3,19} Accordingly, our revised recommendation avoids advocating for universal application of cumbersome screening instruments, thereby protecting clinician and patient time, as people reporting alcohol consumption at or below the CGAH low-risk thresholds can simply be offered brief education aimed at reinforcing safer alcohol use (Appendix 1, Section 5, Case 2).¹ With the exception of those engaged in underaged drinking (see Clinical Considerations section), for most individuals who drink below the CGAH thresholds, education can briefly highlight CGAH's conclusions that no amount or type of alcohol is good for your health,¹ answer any questions (e.g., about a family member's alcohol use), and reinforce the patient's existing healthy decision to not drink excessively.

We rated the certainty of the evidence as moderate, given that the impacts of brief screening and intervention on prevention of emergent alcohol problems have not been well studied.^{8,20} We rated the strength of this recommendation as strong, based on clinician time considerations and committee consensus that people with low-level alcohol consumption are unlikely to benefit from time-intensive screening or intervention, alongside the importance of universal patient education on the evidence of alcohol harms (Box 1).¹

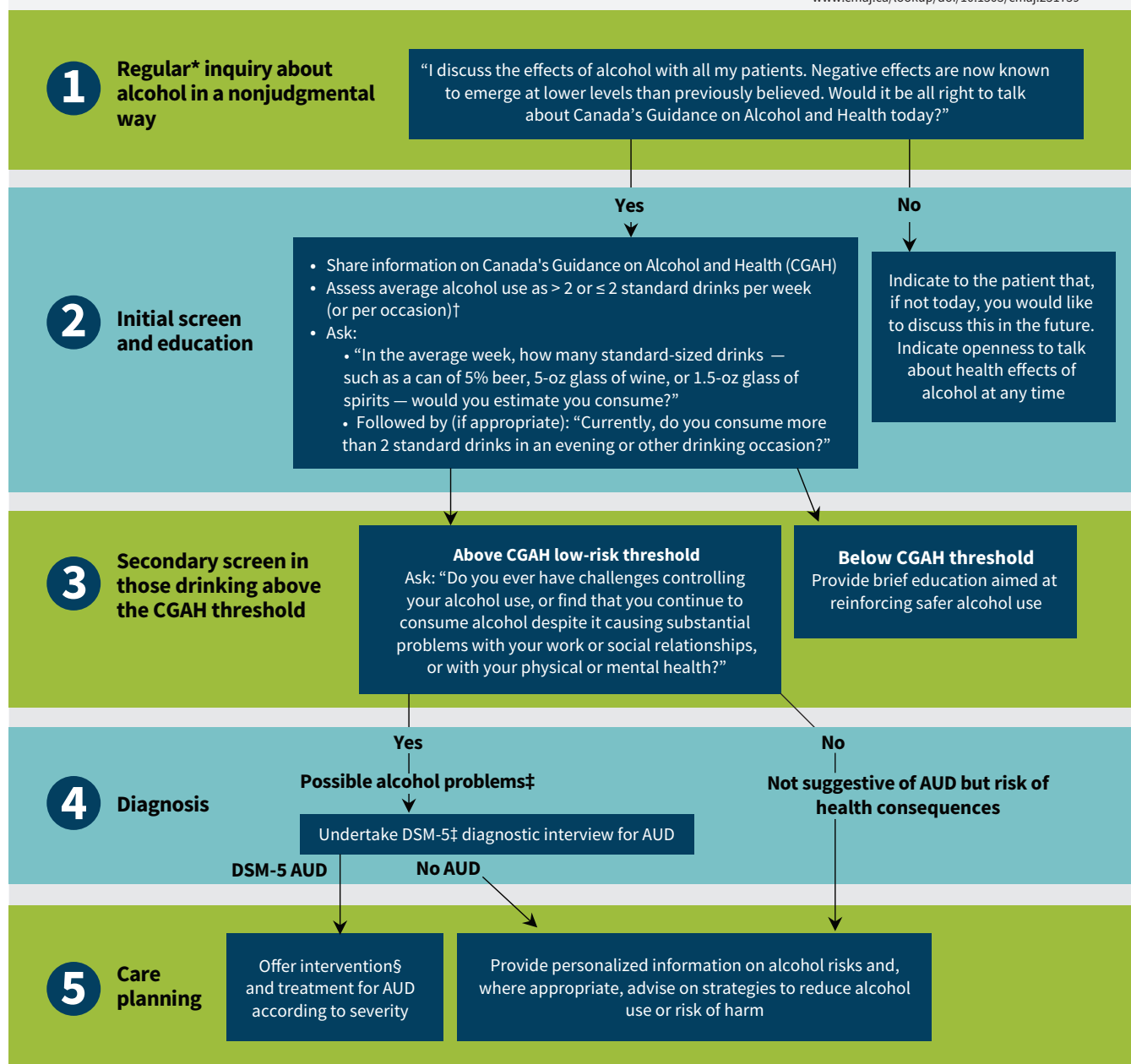
Individuals drinking above the CGAH low-risk levels should be assessed for alcohol-attributable risks and possible health or other problems attributable to alcohol that might imply an underlying alcohol use concern (strong recommendation, moderate-certainty evidence).

A 2018 Cochrane review showed that brief interventions delivered after identification of harmful or hazardous alcohol use can

Screening for health risks attributable to alcohol



Guideline and appendices available at
www.cmaj.ca/lookup/doi/10.1503/cmaj.251759



*Alcohol use should be assessed regularly and whenever problems associated (e.g., driving under the influence charge) or potentially associated (e.g., hypertension, elevated liver enzymes, insomnia, low mood) with alcohol use disorder (AUD) are present. Information on screening frequency and indications is in the full original guideline <https://www.cmaj.ca/content/cmaj/suppl/2023/10/11/195.40.E1364.DC1/230715-guide-1-at.pdf>.

[†]CGAH risk threshold is in reference to drinks per week, drinks per individual drinking episode, or both (Box 1).

[‡]For details on conducting a diagnostic interview, see full original guideline and Appendix 1, eTable 6.

[§]People with AUD should receive the same personalized information (see Appendix 1, Section 5 for illustrative cases and suggested care provider support) and advice as those without AUD, and AUD treatment according to severity (see full original guideline).

Figure 1: Screening for health risks attributable to alcohol. Note: AUD = alcohol use disorder, CGAH = Canada's Guidance on Alcohol and Health, DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.

Box 2: GRADE approach and interpretation

The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach¹⁵ assigns a rating for certainty of evidence and strength for each recommendation.

Certainty of evidence

Initial estimates of certainty are based on a traditional hierarchy of evidence, whereby meta-analyses are assigned the highest score. Factors that lower confidence in the estimated effect of an intervention include risk of bias; factors that increase confidence include large effect sizes and consistency. The final certainty ratings are reflective of the estimated effect and limitations of the evidence base as identified by the committee, as described below:

- **High:** Further research is very unlikely to change confidence in the estimate of effect.
- **Moderate:** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
- **Low:** Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
- **Very low:** Any estimate of effect is very uncertain.

Strength of recommendation

To determine strength of recommendations, the GRADE system takes into account the quality of evidence and additional factors including risk-benefit ratios and feasibility.

A strong recommendation indicates the following:

- **For patients:** Most patients in the given situation would want the recommended course of action and only a small proportion of patients would not.
- **For clinicians:** Most individuals should receive the recommended course of action. Adherence to this recommendation according to the guideline could be used as a quality criterion or performance indicator. Formal decision aids are not likely to be needed to help individuals make decisions consistent with their values and preferences.
- **For policy-makers:** The recommendation can be adapted as policy in most situations, including for the use as performance indicators.

A conditional recommendation indicates the following:

- **For patients:** Most patients in the given situation would want the recommended course of action, but many would not.
- **For clinicians:** Clinicians should recognize that different choices will be appropriate for different patients, and that they must help each patient arrive at a management decision consistent with the patient's values and preferences. Decision aids may well be useful to help individuals make decisions consistent with their values and preferences. Clinicians should expect to spend more time with patients when working toward a decision.
- **For policy-makers:** Policy-making will require substantial debates and involvement of many interest-holders. Policies are also more likely to vary between regions. Performance indicators would have to acknowledge that adequate deliberation about the management options has taken place.

reduce alcohol consumption in comparison to minimal or no intervention (mean difference -20 g/wk, 95% confidence interval [CI] -28 to -12).²⁰ Evidence suggests that brief intervention may also reduce other harms, such as driving after drinking.²¹ Accordingly, in people exceeding the CGAH low-risk thresholds, we recommend assessing their alcohol consumption patterns to assess for possible risky circumstances involving alcohol, such as driving under the influence or heavy episodic use of alcohol, and then briefly assessing for possible health or other problems attributable to alcohol use.

Here, we propose a simple screening question to identify people at lower and higher risk of serious alcohol problems, as follows: "Do you ever have challenges controlling your alcohol use, or find that you continue to consume alcohol despite it causing significant problems in your work or social relationships, or with your physical or mental health?"

Most common alcohol-attributable concerns are reflected in the DSM-5 definition of AUD involving "clinically significant impairment or distress" associated with 11 specific criteria, which past research has shown are easily understood and reported by patients (Appendix 1, eTable 6).²² These criteria involve the 4 domains of impaired control (criteria 1 to 4), social impairment (criteria 5 to 7), risky use (criteria 8 to 9), and pharmacologic criteria involving tolerance or symptoms of withdrawal (criteria 10 to 11).⁴ We acknowledge that our suggested screening question does not include the risky use and pharmacologic domains. However, both risky use^{23,24} and pharmacologic criteria (particularly tolerance)^{25,26} have been subjected to criticism for having relatively poor psychometric performance.²⁷

We rated the certainty of the evidence as moderate, as assessing for alcohol-attributable risks and problems above the CGAH threshold has not been well studied. However, we rated the strength of this recommendation as strong, given past research demonstrating the ability of patients to understand the DSM-5 domains,²² and committee consensus that all patients should be assessed for alcohol-attributable risks and possible health or other problems.^{20,21}

In individuals who exceed the CGAH low-risk thresholds but do not endorse alcohol-attributable problems, personalized information on alcohol risks should be provided and, where appropriate, advice on strategies to cut down consumption can be provided without pursuing a DSM-5 diagnostic assessment (strong recommendation, moderate-certainty evidence).

As with the previous 2 recommendations, this recommendation stems from past guidance and evidence supporting brief intervention approaches to promote safer alcohol consumption.^{3,19-21} Specifically, in people whose consumption exceeds the CGAH low-risk thresholds but who indicate that they do not feel they have alcohol-attributable problems, evidence-based education on strategies to cut down consumption (Table 2)²⁸ and, where appropriate, brief intervention (Appendix 1, Section 3) can be provided without further screening or assessing for a DSM-5 AUD diagnosis.^{3,8,20} Although it is important to quantify alcohol use accurately (Box 1), excessive consumption is not part of an AUD diagnosis.⁴

We emphasize that most people who use alcohol regularly will be screened into this group.¹ Several cases are provided to

Table 2: Protective behavioural strategies for patients to reduce alcohol use²⁸

Strategy	Examples
Strategies for adults	
Set personalized goals that you can revisit over time	• Get a sense of how much you normally drink in a day or week • Set realistic personal goals, and make sure you talk to a health care provider if stopping all at once might be a concern
Identify and address circumstances and environments where you consume alcohol	• If you drink when bored or stressed, have a strategy to do something social or physical in these circumstances instead • Plan alternative activities or tasks at times when you would usually drink alcohol
Know and pay attention to your limits	• When you do drink, set yourself a limit on the number of drinks and try to stick to it • If you drink daily, set a goal of drink-free days or weeks depending on your drinking frequency
Hydrate and eat before and during drinking	• Drink water rather than alcohol-containing drinks if feeling dehydrated • Eating and drinking water can address thirst and hunger and may affect absorption of alcohol
Drink nonalcoholic beverages or dilute drinks	• Have nonalcoholic beverages available • Consider alternating nonalcohol and alcohol-containing drinks • Dilute alcoholic drinks, especially when drinking “hard liquor” or spirits
Strategies for adolescents and young adults	
Protective behavioural strategies	• Do not drink alone • Avoid or limit time you spend with friends who drink heavily, or in places where you tend to drink heavily • Avoid or limit drinking games • Drink mindfully and sip drinks rather than rapidly consuming • Keep your can tabs or bottle caps to count your total drinks • Keep track of your drinks especially in environments risky for drug-facilitated sexual assault

Note: Compiled from relevant literature,²⁸ Canada’s Guidance on Alcohol and Health, and the website helpwithdrinking.ca.

highlight common scenarios, including moderate (Appendix 1, Section 5, Case 3) and heavy episodic use (“binge”; Appendix 1, Section 5, Case 4), and regular heavy alcohol consumption (Appendix 1, Section 5, Case 5). Additionally, we wish to stress that circumstances may exist where there is objective evidence of alcohol problems and where the pre-test probability is so high that moving directly to an AUD diagnosis is appropriate (Appendix 1, Section 5, Case 6).²⁹

Unlike other areas of health care in which approaches to screening are regularly critically appraised,³⁰ past alcohol screening recommendations have not included fulsome descriptions of possible harms of screening, including risks of false-positive and false-negative results.^{3,8} Our new screening recommendations are not narrowly focused on AUD diagnoses, but regarding possible rates of “false-negative” screening when our proposed assessment of possible alcohol problems is used, we highlight that the DSM-5 diagnosis relies entirely on self-report.⁴ Whereas clinicians should be aware that some individuals with symptoms and signs of AUD may not identify alcohol problems themselves,³¹ excessive alcohol use itself is not part of the AUD diagnostic criteria and has been shown to be insufficient to diagnose AUD.³² In this context, clinicians should offer regular follow-up, while also being mindful that a positive DSM-5 diagnosis of AUD in a person who does not disclose any related problems with their alcohol consumption may also imply a false-positive AUD diagnosis.^{33–35}

We rated the certainty of the evidence as moderate, given that only moderate-level evidence exists to show the impacts of screen-

ing on changing behaviour in those with heavy alcohol use.⁸ We rated the strength of this recommendation as strong, given clear identification of progressively worsening health and social harms with alcohol consumption above the CGAH thresholds (Box 1).¹

Patients who exceed the CGAH low-risk thresholds and who subsequently report possible problems with alcohol consumption should be moved directly to a DSM-5 diagnostic interview for AUD rather than further screening (strong recommendation, moderate-certainty evidence).

The psychometric performance of screening tools for identifying a lower likelihood of AUD is relatively poor (described later in the Methods and Literature Review and Quality Assessment sections).⁴ This means that in circumstances where the pre-test probability of AUD is moderate to high, screening is not beneficial.³⁶ Therefore, in patients who exceed the CGAH low-risk thresholds and who subsequently report recent (e.g., past 12 mo) problems with alcohol consumption in response to the proposed question (“Do you ever have challenges controlling your alcohol use, or find that you continue to consume alcohol despite it causing significant problems in your work or social relationships, or with your physical or mental health?”), we recommend moving directly to a DSM-5 diagnostic interview for AUD without further screening.²⁹

Although basic knowledge of how to assess the 11 DSM-5 criteria is important to avoid false-positive diagnoses,³⁵ in health care professionals familiar with assessing for AUD, this process generally takes only a few minutes more than the time needed to

complete commonly recommended screening tests.⁴ Referral for further assessment should be considered by care providers uncomfortable with making an accurate diagnosis, as described in the original guideline and Appendix 1, eTable 6.³ Depending on the outcome of the DSM-5 diagnostic interview, care or referral can be provided accordingly (Appendix 1, Section 5, Case 5).

Although some “false-positive” screening for AUD under the above approach can be expected (i.e., individuals who acknowledge problems secondary to their alcohol consumption but subsequently are not diagnosed with AUD according to DSM-5), we note that the DSM-5 AUD definition has been subjected to considerable criticism, given the very low threshold for diagnosing mild AUD.^{34,35,37} More importantly, even in patients who screen positive to the proposed question but are not subsequently diagnosed with AUD despite the above concern, clinician intervention tailored toward alcohol-attributable risks and problems is still of likely benefit.^{3,8,20}

We rated the certainty of the evidence as moderate; although research demonstrates that self-reported measures accurately predict underlying DSM-5 AUD diagnoses,²² moving directly to a DSM-5 interview has not been well studied in relation to the CGAH thresholds. We rated the strength of this recommendation as strong based on clinician time considerations and the recognized need and benefits of diagnosis to enable patients to access further AUD care according to severity.³

Clinical considerations

Youth

The committee highlights the CGAH conclusion that no lower-risk level of alcohol consumption exists in the context of underage drinking and that CGAH recommends delaying alcohol use for as long as possible (Box 1). However, the committee acknowledges that a harm reduction approach involving the strategies recommended for young adults may be required in adolescents using alcohol. Readers are encouraged to refer to Appendix 1, Section 5, Case 7 and Section 8.4 of the original guideline (available at <https://www.cmaj.ca/content/cmaj/suppl/2023/10/11/195.40.E1364.DC1/230715-guide-1-at.pdf>) for detailed information about youth alcohol use.

Other substance use

The guideline committee also discussed the importance of screening for nonalcohol substance use concerns, but identified that screening tools for other substances (e.g., cannabis) have not been critically evaluated (e.g., for risk of bias) as was recently done for alcohol screening tools.⁴ Nonetheless, the committee advises that screening for alcohol be part of an overall conversation about health risks and harms of psychoactive substance use.

Methods

Given the release of CGAH, CRISM undertook updating the screening recommendations in the 2023 national guideline.³ We used the Appraisal of Guidelines for Research and Evaluation Instrument II³⁸ to support a rigorous update of existing screening recommendations.³

We also used the GRADE tool¹⁵ to score recommendations and certainty of evidence (Box 2).

Composition of participating groups

The development of the revised recommendations was planned and overseen by a steering committee consisting of co-chairs of the original CRISM Canadian guideline committee (E.W., J.R.),³ and a guideline manager (S.C.W.). We assembled the interdisciplinary guideline committee by inviting all members of the original guideline committee and through outreach conducted by the 5 CRISM nodes and CRISM’s Indigenous Engagement Platform in May and June 2025. The interdisciplinary guideline committee comprised 22 people with expertise spanning addiction medicine, family practice, mental health, clinical research, health care administration, social work, nursing, and clinical psychology, and included 3 people who self-identified as Indigenous and 4 people with lived and living experience of AUD.

Literature review and quality assessment

The BC node of CRISM undertook a comprehensive systematic review of alcohol-related screening, with a focus on examining study quality.⁴ The search included articles published between January 2013 (after DSM-5 was published) and February 2023. We assessed study quality using the JAMA Level of Evidence study quality rating system (Appendix 1, eTable 2)³⁹ and the Quality Assessment of Diagnostic Accuracy Studies tool (Appendix 1, eTable 4).⁷

Of note, most published assessments of alcohol screening tools were found to be of very low quality when subjected to risk-of-bias assessment (Appendix 1, eFigure 1 and eTable 2).⁴ Among a modest number of studies deemed to be lower risk of bias, definitions of high-risk drinking were so heterogeneous as to preclude meta-analysis.⁴ Critically, no identified instrument screened for alcohol at the CGAH low-risk threshold. Specific to AUD screening, where the few studies at lower risk of bias with some measure of a DSM-5 diagnosis as the reference standard were identified, several currently recommended screening tests were either unproven or found to perform so poorly as to no longer be recommended (Table 3).^{3,4}

When enough quality studies were available for meta-analysis, results suggested that the full 10-item Alcohol Use Disorders Identification Test (AUDIT) had only modest psychometric performance for identifying those with AUD (sensitivity 71%, 95% CI 54% to 84%).^{4,22,42} The AUDIT’s sensitivity is such that approximately one-third of patients with AUD would screen as not having AUD and, because it is unconnected to CGAH, an even higher proportion of people drinking well above the CGAH low-risk level would similarly screen negative for hazardous drinking on the AUDIT.⁴ This is important as universal screening must be effective for both AUD and hazardous alcohol consumption.

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) youth screening tool demonstrated reasonable psychometric performance for AUD screening, but it is based on a highly complex algorithm advising different questions for different age groups.⁴ The NIAAA recommendations are also unconnected to the CGAH thresholds.^{4,43}

Table 3: Other national and selected international guidelines considering alcohol screening

Organization and guideline	Year	Country	Summary	Comparisons with our guideline update
Canadian Centre on Substance Use and Addiction: CGAH ¹	2023	Canada	This guidance was based on the latest research on alcohol-related risks and replaced Canada's low-risk alcohol drinking guidelines issued in 2011.	The CGAH recommendations describe alcohol use harms but do not recommend an approach to screening, which we have provided in our update.
CRISM: Canadian guideline for the clinical management of high-risk drinking and AUD ³	2023	Canada	The 2023 screening guidance suggested first using SASQ, which has been assessed against US heavy alcohol definitions, and — if positive — followed by utilization of 1 of several suggested multiquestion screening tools (AUDIT, AUDIT-C, CAGE), with a DSM-5 AUD diagnosis thereafter if positive.	In this guideline, we have replaced the sequential approach to screening recommended in the previous CRISM guideline, based on a systematic review and critical appraisal of screening tools and approaches that suggest those we previously recommended are no longer evidence based.
US Preventive Services Task Force: Unhealthy alcohol use in adolescents and adults: screening and behavioural counselling interventions ⁸	2018	United States	The task force recommended universal screening for heavy alcohol use in adults aged ≥ 18 years, but found insufficient evidence for screening adolescents. Several screening instruments, such as AUDIT-C and SASQ, were recommended, but critical appraisal of underlying study quality was not assessed.	In our update, we do not recommend the AUDIT-C and SASQ screening tests, based on our critical appraisal of the literature that demonstrated a disconnect between these measures and CGAH, and overall lack of quality studies (SASQ) or poor psychometric performance (AUDIT-C) in screening for AUD.
Australian Government Department of Health: Guidelines for the treatment of alcohol problems ⁴⁰	2021	Australia	The guideline recommends routine screening using AUDIT in primary care and hospital settings and the AUDIT-C “in the general community.”	Whereas AUDIT is acknowledged to have modest psychometric performance, it is viewed as impractical in primary care and unconnected to CGAH. Given poor performance, we do not recommend AUDIT-C.
Canadian Coalition for Seniors' Mental Health: Canadian guidelines on AUD among older adults ⁴¹	2019	Canada	This guideline includes screening for AUD among older adults (aged ≥ 65 yr). Various screening tools are described without critical appraisal of study quality or recommendations regarding preferred screening tools.	Our update includes a recommendation for universal screening that can be applied to all age groups, not just people aged ≥ 65 years.
Note: AUD = alcohol use disorder; AUDIT = Alcohol Use Disorders Identification Test; AUDIT-C = Alcohol Use Disorders Identification Test–Concise; CAGE = Cut down drinking, Annoyed by criticism, Guilty feelings, and Eye-opener questionnaire; CGAH = Canada's Guidance on Alcohol and Health; CRISM = Canadian Research Initiative on Substance Matters; DSM-5 = <i>Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition</i> ; SASQ = Single Alcohol Screening Question.				

Development of recommendations

Between May 2025 and February 2026, the steering committee and full guideline committee conferred through video conference and email. To develop the recommendations, the steering committee first reviewed the results of the systematic review, identifying that most alcohol-related screening tools are impractical and remain overwhelmingly unimplemented,^{9–11} and that most currently recommended screening tools (Table 3) are unproven, are demonstrably ineffective, or can be shown to have relatively poor psychometric performance.⁴ The committee also found that no identified screening tools considered risks as defined by CGAH.¹

Considering this literature, the steering committee developed an initial draft of the revised screening recommendations, which was presented to the guideline committee. The guideline committee provided iterative feedback on the draft recommendations through a cycle of review and revision until the members achieved consensus on the final recommendations and a feasible time-saving screening algorithm, which considered CGAH¹ and other recent research.^{13,14}

External review

Between September and October 2025, the guideline was externally reviewed by an interdisciplinary committee, assembled by the Canadian Alcohol Use Disorders Society (<https://www.cauds.org>), of 4 people with expertise in neuroscience, family medicine, or addiction medicine, or who had lived and living experience. Their feedback focused on avoiding stigmatizing language, clarifying the frequency of screening, simplifying the screening questions, and suggesting strategies to optimize self-report. The draft recommendations were revised by the steering committee based on this feedback, and then shared with the full committee for review and approval.

Management of competing interests

We adhered to the Guidelines International Network's principles for disclosure of interests and management of conflicts.⁴⁴ The guideline manager (S.C.W.) served as the competing interest adjudicator (with support from the steering committee co-chairs). Upon the assembly of the committee and again at the end of guideline development, all committee members were required to

disclose all sources and amounts of direct and indirect remuneration received in the previous 5 years from industry, for-profit enterprises, and other entities (i.e., direct financial conflicts) that could introduce real, potential, or perceived risk of bias. No committee members disclosed a potential conflict of interest involving direct monetary or nonmonetary support from alcohol or pharmaceutical industry sources, whether associated with the development of screening tools or other related interests within that time frame. No committee members reported that their clinical revenue could potentially be influenced. In terms of indirect sources of potential interest, 9 of 22 committee members disclosed special interests in relation to the content of this guideline. These pertained to clinical or other practice (e.g., academic interest), committee membership, expert testimony, public statements, or research activities. No disclosed indirect competing interests were deemed to be relevant to screening, and all committee members were encouraged to participate equally.

Implementation

Low rates of screening for alcohol problems in Canada have been called “a systemic failure.”⁴⁵ Barriers to screening have been clearly identified; in addition to limited clinical time, providers have expressed concern with cumbersome screening instruments, as well as difficulty initiating conversations about alcohol when unrelated to the patient’s presentation.^{11,12,46}

The current recommendations are specifically designed to address these concerns. The algorithm that summarizes the recommendations provides a natural way to raise the topic, and enables providers to move on quickly, in patients drinking below CGAH levels, from conversations about alcohol without having to use a screening tool. Finally, the algorithm we propose acknowledges the unique health risks presented by different drinking patterns and allows care providers to tailor conversations according to patient presentation, and to dedicate time to explore AUD diagnoses only in those disclosing problems.

Strategies such as incorporating the screening tool into training programs and clinical infrastructure (e.g., electronic medical records in primary care) may improve uptake. With available resources from the Canadian Institutes of Health Research and Health Canada, CRISM and the Canadian Centre on Substance Use and Addiction are planning related knowledge-translation activities, including local and national knowledge mobilization efforts (e.g., webinars), as was undertaken with the original guideline.³

CRISM intends to update the guideline in about 5 years, depending on the availability of new literature.

Other guidelines

The 2023 CRISM guideline recommended first using the Single Alcohol Screening Question, which was assessed against the US definition of heavy alcohol consumption similar to Canada’s now-outdated recommendations,⁴ and — if positive — followed by use of one of several suggested multi-item screening tools, and then evaluating for a possible AUD diagnosis if positive. Other guidelines similarly recommended screening tools that

can no longer be viewed as evidence based and are incompatible with CGAH recommendations (Table 3).¹

Gaps in knowledge

In reports of alcohol screening diagnostic performance studies, a rarely acknowledged concern is the relatively poor test–retest reliability of underlying reference standard AUD diagnoses and definitions of high-risk drinking.⁴⁷ Specifically, the field trials undertaken to assess the test–retest reliability of DSM-5 AUD diagnoses in North America reported a κ statistic (a measure of agreement between 2 independent assessments) of only 0.40 (95% CI 0.27 to 0.54).⁴⁷ This, alongside other criticism,⁴⁸ can be interpreted to mean that even when 2 expert clinicians are fully trained to conduct a DSM-5 diagnostic interview, they may still disagree approximately one-third of the time. An equally important and related concern is that many patients are known to underestimate or under-report their alcohol consumption.⁴⁹ More work is required in developing effective screening and diagnostic tools.

In the context of these knowledge gaps, the guideline committee encourages minor modifications to the recommended screening approach according to clinician experience and patient population. For instance, all providers should undertake training to ensure that principles of cultural safety and humility are incorporated into screening, which may increase trust and decrease barriers to care among Indigenous people (Appendix 1, eAppendix 1, eTable 4). Similarly, the NIAAA youth screening tool suggests that some youth may be put at ease by initial questions about their peers’ alcohol use before being asked about their own use.^{4,43}

Limitations

The suggested screening algorithm and proposed questions have not been subjected to prospective evaluation and should be updated as new information becomes available. From the perspective of the as yet unknown psychometric performance of the proposed tools, a key issue is that very imprecise measurement of the underlying reference standard diagnosis can make screening test performance estimates unreliable.⁷ Thus, in light of the relatively poor test–retest reliability of underlying AUD diagnoses⁴⁷ and known concerns with self-reported alcohol consumption,⁴⁹ implementation science methods considering clinician adoption, as well as patient-oriented and public health outcomes, should be prioritized.⁵⁰

Conclusion

These screening recommendations represent a pragmatic approach that is intended to be a resource for universal screening and is cognizant of past barriers. The implementation of these recommendations could broadly enable greater awareness of the health harms of alcohol and earlier intervention with potential to avoid worsening problems related to alcohol, as well as to support identification of and treatment for those with more serious concerns.

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